

**WSR-88D HANDBOOK  
VOLUME 3, RDA**

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**OPERATOR HANDBOOK  
GUIDANCE  
ON  
ADAPTABLE PARAMETERS  
DOPPLER METEOROLOGICAL RADAR  
WSR-88D**



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## **Preface**

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The WSR-88D radar is a highly complex, computerized radar system. The system includes thousands of adaptable parameters which allow the required operational, geographical, and meteorological flexibility needed to support the varied missions of the three Principal User Agencies.

With over 11,000 adaptable parameters available within the WSR-88D unit, centralized control over many of the system and meteorological parameters is required to ensure a baseline operational standard is met in support of the national radar network. However, many parameters were designed to fine-tune the WSR-88D for local operational needs. Therefore, Federal Meteorological Handbook Number 11 (FMH-11) has defined three Levels of Change Authority (LOCA) for adaptable parameter control. The hierarchy established by these LOCA was defined to ensure that authority for change is based on expertise and scope of impact while still allowing for operational flexibility.

The rapidly changing nature of the WSR-88D program necessitated the publication of an easily updatable, comprehensive document to describe, define, and provide guidance for adaptable parameters under the purview of each LOCA. To address this need, the specific parameters under each LOCA are defined in the WSR-88D Guidance on Adaptable Parameters Handbook series. The authority for the adaptable parameter baseline settings and LOCA defined in this publication series resides in FMH-11.

The WSR-88D Guidance on Adaptable Parameters Handbook series was designed for operational use by field personnel and system managers, and as supplemental materials for agency training developers. To fill this broad design mandate, the adaptable parameters handbook series is divided into three separate volumes: one each for the RPG, PUP, and RDA functional areas. Each volume addresses only those parameters applicable to, and accessible through that specific component of the WSR-88D system. The appropriate screen where the adaptable parameter can be changed is shown. Additionally, for each adaptable parameter, the specific LOCA and any relevant information available is provided. As a baseline document, this handbook should be kept in a location that is easily accessible to operators and system managers. It is recommended that site specific adaptation changes be documented and posted to the appropriate section of this handbook.

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# Chapter 1

## Overview

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### 1.1 Introduction

The WSR-88D system was designed such that modifications to the hardware and software operating characteristics can be made through changes in adaptable parameter settings. These changes allow for system optimization based on meteorological, climatological, and regional variations, as well as user preferences.

Recognizing the rapidly changing operational environment and the Federal Meteorological Handbook Number 11 (FMH-11) update cycle, the Doppler Radar Meteorological Observations Working Group (DRMO-WG) chairman initiated the development of more responsive and user oriented adaptable parameters guidance documents. The WSR-88D Guidance on Adaptable Parameters Handbook Series, RPG, PUP and RDA, documents were designed to meet these requirements.

### 1.2 Policy

This document, as directed by FMH-11, Part A, serves to identify the specific adaptable parameters that fall under each Level of Change Authority (LOCA). It also defines the RDA system baseline adaptable parameter settings required to support the national radar network and provides guidance on certain URC and Agency level parameter changes.

### 1.3 Levels of Change Authority (LOCA) Philosophy

A hierarchy has been established to ensure maximum flexibility while maintaining data and operational integrity of the WSR-88D units throughout the nation. This hierarchy is divided into three distinct levels: Operational Support Facility (OSF) to address engineering, meteorological, and scientific parameters, Unit Radar Committee (URC) for changes that only affect the operation of their particular WSR-88D unit, and Agency to control parameters that only affect local operations. Each level controls those engineering, operational, and meteorological parameters that best apply to its level of expertise and responsibility. The definition for each level of change authority is provided in [Chapter 2](#).

### 1.4 Document Design Characteristics

This volume is divided into three chapters. This chapter provides an overview of adaptable parameters. [Provides further definitions on the Level of Change Authority \(LOCA\) categories.](#) [Chapter 3](#) provides a discussion and table for each of the eight categories of RDA adaptation data:

[TOWER ADAPTATION](#)  
[ANTENNA/PEDESTAL ADAPTATION](#)  
[SPS ADAPTATION](#)  
[TRANSMITTER ADAPTATION](#)  
[RECEIVER ADAPTATION](#)  
[WIDEBAND ADAPTATION](#)  
[SOT ADAPTATION](#)

### PASSWORD ADAPTATION

[Chapter 3](#) will provide the necessary guidance for interpreting the information provided by the adaptation data tables.

## 1.5 Adaptable Parameter Change Process

### 1.5.1 Urgent Changes to OSF Controlled Adaptation Data Values

Under certain conditions in order to best support local warning and forecast capabilities, individual sites may need to quickly change the value of site-specific parameters which are controlled at an OSF LOCA. The need for change may result from local knowledge of radar performance, or of other geographic, seasonal, and/or climatological effects. The timeliness of these changes may preclude the normal configuration change process procedures. In these cases, the site may submit an immediate parameter change request to the OSF using the following guidelines:

Requests may only be made by the Chairperson of the WSR-88D Unit Radar Committee with the concurrence of the URC voting members. These requests will be made in writing to the Director of the OSF. The OSF will send a copy of the change request to the HQ AWS/SYDR, HQ NWS W/OSO112, and FAA NEXRAD Focal Point.

The Adaptable Parameter Working Group (APWG) technically evaluates the immediate parameter change request within 2 working days of receipt and then responds to the OSF Director.

The OSF Director, who is the signatory authority for delegating to sites the responsibility to make immediate changes to OSF level parameters, responds in writing to the originator of the immediate parameter change request using standard agency procedures. In addition, the Director will deliver copies of the response to OSF Configuration Management (CM) and to the agency WSR-88D focal points.

The requesting site can implement the change upon receipt of an affirmative response from the OSF Director.

### 1.5.2 Routine Changes to OSF Controlled Adaptation Data

The triagencies may request changes to OSF-controlled adaptable parameter values. General guidance for DOC (NWS) and DOD Requests for Change (RC) is provided below.

NWS-originated parameter RC will first require the requesting office to submit its request to their regional headquarters WSR-88D focal point. If approved, the regional headquarters will forward the RC to the NWS NEXRAD Committee (NNC) for review. The NNC will forward approved requests to the OSF by memo to the OSF Director, for the attention of the OSF CM Section.

DOD-originated parameter requests for change should be submitted on AF FM 3215, C4 Systems Requirement Document. The form is submitted for base approval, MAJCOM approval, then AWS approval. If approved at all levels, HQ AWS/SYDR will submit the CSRD as a RC to the OSF Director, for the attention of the OSF CM section.

Requests for Change received by the OSF Director are forwarded to the OSF CM Section for processing into the Configuration Change Request (CCR) format. The CCR is forwarded to the APWG for their review and recommendation. If approved by the APWG, a recommendation is then forwarded to members of the OSF Configuration Control Board and to the OSF Director, who will approve or disapprove the recommended change. If the Director approves the change, the OSF CM Section will implement the change.

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# Chapter 2

## Levels of Change Authority

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### **2.1 Introduction**

Chapter 2 defines the responsibilities of each Level Of Change Authority (LOCA). These LOCA categories are defined and established by FMH-11, Chapter A. The majority of the RDA adaptation data items fall under the OSF LOCA. The [Chapter 3](#) tables listings of RDA Adaptation data will specifically define those RDA adaptation data items which do fall under the URC or Agency LOCA.

### **2.2 Levels of Change Authority Definitions**

#### **2.2.1 Operational Support Facility**

The Operational Support Facility (OSF) through the Adaptable Parameter Working Group (APWG) is authorized to determine the general validity and range of adaptable parameter values for changes that involve technical and scientific characteristics of WSR-88D data acquisition and algorithmic processing. In addition, the OSF shall be authorized to determine, specifically, the values of the aforementioned default adaptable parameter values for WSR-88D equipment owned by Department of Defense, Department of Transportation, and Department of Commerce. Since the APWG shall remain subordinate to the NEXRAD Program Management Committee (PMC), the OSF level of change authority shall reflect the PMC's position on triagency policy in WSR-88D operations.

In the RDA, many of the OSF LOCA items are actually path losses/gains which are unique at each site. However, they fall under the OSF LOCA because the OSF is responsible for ensuring that procedures are available for consistent measurements of these path losses/gains to provide optimum system calibration across the WSR-88D network. Because of this, the OSF LOCA has been broken down into two subcategories. One category (OSF) will consist of fixed values which will be the same at all sites and WILL NOT be changed by site personnel. The other category of data items (OSF/TM) can be changed by site personnel based on measurements/alignments as directed by technical manuals (TM) or other guidance from the OSF (Mod. Notes, Software Notes, etc.). These two categories are further defined in [Chapter 3](#).

#### **2.2.2 Unit Radar Committee**

The Unit Radar Committee (URC) is authorized to change the values of WSR-88D adaptable parameters, and establish adaptation parameter policy for the principal users within the URC, insofar as these changes affect only the operation of the URC's WSR-88D system. There is only one URC LOCA RDA adaptation data item (TOVER -SPS9 on [Table 3-3](#)).

### **2.2.3 Agency**

The Department of Defense (DOD), Department of Transportation (DOT), and Department of Commerce (DOC), each is authorized to change the values of adaptable parameters and establish WSR-88D adaptation parameter policy in order to meet their agency-specific mission requirements and criteria.

There are only four Agency LOCA RDA adaptation data items, two on the Tower adaptation data table ([Table 3-1](#)) and two on the Password adaptation data table ([Table 3-8](#)).

# Chapter 3

## RDA Adaptation Data Listings

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### **3.1 Introduction**

This chapter addresses all of the RDA adaptation data items. Further definition of the Level Of Change Authority (LOCA) categories are provided in paragraph 3.2. For each of the eight RDA adaptation categories, a brief discussion of each category is provided and a specific table is provided for each listing.

### **3.2 Level Of Change Authority (LOCA)**

The tables of RDA adaptation data items has a LOCA column that will provide a LOCA for each of the 530 RDA adaptation data items. There are four possible LOCAs as defined below.

#### **3.2.1 Agency**

The agency determines this value as defined in paragraph [2.2.3](#). A value is recommended in the Comments/TM Ref. column.

#### **3.2.2 URC**

The URC determines this value as defined in paragraph [2.2.2](#). A value is recommended in the Comments/TM Ref. column.

#### **3.2.3 OSF**

These values are "fixed" values and WILL NOT be changed by site personnel (unless specific guidance is received from the OSF). For all of these items, the Value column of the listings will show the "fixed" value. The only exception to this (a listed value) is the site's latitude, longitude, frequency, and site configuration items which are defined by "As Installed" in the Comments/TM Ref. column.

#### **3.2.4 OSF/TM**

These items fall under the OSF LOCA. However, these items are unique to each site since they are based on path loss measurements, alignments, etc. which are performed periodically by site personnel. Thus, these items may be changed by site personnel as based on applicable technical reference procedures. The Comments/TM Ref. column of the listings will list the applicable technical data reference for measuring/determining the appropriate value for your site. Technical manuals are referenced by the EHB number, followed by a paragraph or table (T) reference. In cases where a technical data reference is not provided, the OSF is working towards development of an appropriate procedure. Call the OSF Hotline if further guidance is needed in this area.

### 3.3 RDA Adaptation Data Categories

[Table 3-1](#) - Tower Adaptation Data (40 items total). This listing contains the site's latitude, longitude, configuration, Archive II parameters, and alarm thresholds pertinent to the site's generator, temperature sensors, and maintenance console (DAU) power supplies. Two items (lines 8 and 21) are at the Agency LOCA.

[Table 3-2](#) - Antenna/Pedestal Adaptation Data (10 items total). This listing contains parameters for control and monitoring of the antenna/pedestal. All but two of these items have "fixed" values.

[Table 3-3](#) - SPS Adaptation Data (176 items total). This listing contains items critical to operation of the signal processing subsystem. Almost all of the 176 items are fixed "values" under OSF LOCA. One item (line item 9) is at the URC LOCA. Thirteen other items (line items 24 through 36) are unique to each site and are listed as OSF/TM LOCA.

[Table 3-4](#) - Transmitter Adaptation Data (34 items total). This listing contains parameters for the transmitter and waveguide system. It has fixed alarm threshold values (OSF LOCA) as well as many measured values indicated by the OSF/TM LOCA.

[Table 3-5](#) - Receiver Adaptation Data (248 items total). This listing contains all of the parameters which are critical to proper operation of the receiver channel. Many of the items are at the OSF LOCA and have "fixed" values; however, most of the items are for path losses which are unique to each site and are listed as OSF/TM LOCA.

[Table 3-6](#) - Wideband Adaptation Data (8 items total). With exception of line item seven (Archive II Jukbox Installed), these items are specific to the wideband circuit(s).

[Table 3-7](#) - SOT Adaptation Data (15 items total). This listing consists of the default values which appear when running the RDASOT clutter map.

[Table 3-8](#) - Password Adaptation Data (4 items total). Password listing. Note that the line items 1 and 3 are at the Agency LOCA.

Table 3-1

## TOWER ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
1. ARCHIVE II DRIVE INSTALLED		F	T	OSF/TM	Note 1
2. ARCHIVE II PLAYBACK ENABLED		F	T	OSF	
3. ARCHIVE II CAPACITY LOW WARNING THRESHOLD	5 VOL SCANS	0	255	OSF	
4. REDUN CHAN CONFIG (1=SGL CHAN,2=FAA,3=NWS)		1	3	OSF	As Installed
5. CONFIGURATION CHANNEL NUMBER		1	2	OSF	As Installed
6. RPG COLOCATED		F	T	OSF	As installed
7. REQUIRED TIME INTERVAL FOR STABLE UTIL POWER	10 MINUTES	1	20	OSF	
8. RECOMMEND SWITCH TO UTIL POWER TIME INTERVAL	MINUTES	5	30	Agency	"15" Recommended
9. MAINT CONSOLE 5 V POWER SUPPLY TOLERANCE	10.0000 PERCENT	0.0000	20.0000	OSF	
10. MAINT CONSOLE +/-15 V POWER SUPPLY TOLERANCE	10.0000 PERCENT	0.0000	20.0000	OSF	
11. MAINT CONSOLE 28 V POWER SUPPLY TOLERANCE	10.0000 PERCENT	0.0000	20.0000	OSF	
12. SITE LATITUDE - DIRECTION		N	S	OSF	As Installed
13. SITE LATITUDE - DEGREES	DEGREES	0	89	OSF	As Installed
14. SITE LATITUDE - MINUTES	MINUTES	0	59	OSF	As Installed
15. SITE LATITUDE - SECONDS	SECONDS	0.0000	59.9999	OSF	As Installed
16. SITE LONGITUDE - DIRECTION		E	W	OSF	As Installed
17. SITE LONGITUDE - DEGREES	DEGREES	0	179	OSF	As Installed
18. SITE LONGITUDE - MINUTES	MINUTES	0	59	OSF	As Installed
19. SITE LONGITUDE - SECONDS	SECONDS	0.0000	59.9999	OSF	As Installed
20. MAX GENERATOR AUTOMATIC EXERCISE INTERVAL	170 HOURS	5	500	OSF	
21. LOW FUEL TANK WARNING LEVEL	%CAPACITY	0	100	Agency	"20" Recommended
22. FUEL LVL HEIGHT/CAPACITY CONVERSION(0% HGT)	0.0000 %CAPACITY	0.0000	100.0000	OSF	
23. FUEL LVL HEIGHT/CAPACITY CONVERSION(10% HGT)	10.0000 %CAPACITY	0.0000	100.0000	OSF	
24. FUEL LVL HEIGHT/CAPACITY CONVERSION(20% HGT)	20.0000 %CAPACITY	0.0000	100.0000	OSF	
25. FUEL LVL HEIGHT/CAPACITY CONVERSION(30% HGT)	30.0000 %CAPACITY	0.0000	100.0000	OSF	
26. FUEL LVL HEIGHT/CAPACITY CONVERSION(40% HGT)	40.0000 %CAPACITY	0.0000	100.0000	OSF	
27. FUEL LVL HEIGHT/CAPACITY CONVERSION(50% HGT)	50.0000 %CAPACITY	0.0000	100.0000	OSF	
28. FUEL LVL HEIGHT/CAPACITY CONVERSION(60% HGT)	60.0000 %CAPACITY	0.0000	100.0000	OSF	
29. FUEL LVL HEIGHT/CAPACITY CONVERSION(70% HGT)	70.0000 %CAPACITY	0.0000	100.0000	OSF	
30. FUEL LVL HEIGHT/CAPACITY CONVERSION(80% HGT)	80.0000 %CAPACITY	0.0000	100.0000	OSF	

**Table 3-1**  
**TOWER ADAPTATION**

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
31. FUEL LVL HEIGHT/CAPACITY CONVERSION(90% HGT)	90.0000 % CAPACITY	0.0000	100.0000	OSF	
32. FUEL LVL HEIGHT/CAPACITY CONVERSION(100% HGT)	100.0000 %CAPACITY	0.0000	100.0000	OSF	
33. MINIMUM GENERATOR SHELTER ALARM TEMPERATURE	8.0000 DEG C	0.0000	50.0000	OSF	
34. MAXIMUM GENERATOR SHELTER ALARM TEMPERATURE	50.0000 DEG C	0.0000	50.0000	OSF	
35. MINIMUM EQUIPMENT SHELTER ALARM TEMPERATURE	8.0000 DEG C	0.0000	50.0000	OSF	
36. MAXIMUM EQUIPMENT SHELTER ALARM TEMPERATURE	29.0000 DEG C	0.0000	50.0000	OSF	
37. MINIMUM AIR COND DISCHARGE AIR TEMP DIFF	5.0000 DEG C	0.0000	10.0000	OSF	
38. MAXIMUM XMTR LEAVING AIR ALARM TEMPERATURE	55.0000 DEG C	0.0000	60.0000	OSF	
39. MAXIMUM RADOME ALARM TEMPERATURE	45.0000 DEG C	0.0000	50.0000	OSF	
40. MAXIMUM RADOME MINUS AMBIENT TEMPERATURE DIFF	5.0000 DEG C	0.0000	10.0000	OSF	

**NOTES:** 1. Set to "T" upon installation of Mod. Note 10 (NWS), TCTO 519 (DOD), or FAA Change Notice 6460.2, CHG 1, Chapter 2.

Table 3-2

## ANTENNA/PEDESTAL ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	Minimum <u>Value</u>	Maximum <u>Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
1. ANTENNA GAIN INCLUDING RADOME	DB	43.0000	47.0000	OSF/TM	6-510, 6-6.28.1.3
2. ANTENNA BEAMWIDTH	DEGREES	0.8000	1.0000	OSF/TM	6-510, 6-6.28.1.3
3. AZIMUTH POSITION GAIN FACTOR (K1)	0.8000 RATIO	0.5000	2.0000	OSF	
4. AZIMUTH DRIVE GAIN FACTOR (K2)	1.0000 RATIO	0.5000	2.0000	OSF	
5. ELEVATION POSITION GAIN FACTOR (K3)	0.8000 RATIO	0.5000	2.0000	OSF	
6. ELEVATION DRIVE GAIN FACTOR (K4)	1.0000 RATIO	0.5000	2.0000	OSF	
7. PEDESTAL PARK POSITION IN AZIMUTH	0.0000 DEGREES	0.0000	359.9900	OSF	Note 1
8. PEDESTAL 5 VOLT POWER SUPPLY TOLERANCE	10.0000 PERCENT	0.0000	20.0000	OSF	
9. PEDESTAL +/-15 VOLT POWER SUPPLY TOLERANCE	10.0000 PERCENT	0.0000	20.0000	OSF	
10. PEDESTAL 28 VOLT POWER SUPPLY TOLERANCE	10.0000 PERCENT	0.0000	20.0000	OSF	

NOTES: 1. This value would be "180" for sites in the Southern Hemisphere.

Table 3-3

## SPS ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
1. NUMBER OF PSP ARITHMETIC UNITS INSTALLED	3 UNITS	1	4	OSF	
2. NUMBER OF CLUTTER FILTER CHANNELS INSTALLED	1	1	2	OSF	
3. MICROCODE DOWNLOAD MODE (0=ROM,1=RAM)	0	0	1	OSF	
4. (QUIES NOISE) LEVEL FOR CLUTTER DEPENDENT THR	0.0001 POWER	0.0000	0.0010	OSF	
5. TWO PULSE CANCELLOR GAIN	4.8000 DB	1.0000	10.0000	OSF	
6. $ k ^2$ HYDROMETEOR REFRACTIVITY FACTOR	0.9300 RATIO	0.1000	1.1000	OSF	
7. SYSTEM NOISE TEMP LIMIT PARAMETER MULTIPLIER	15.0000 RATIO	1.0000	25.0000	OSF	
8. POINT CLUTTER SUPPRESSION THRESHOLD (TCN)	8.0000 RATIO	.3E+01	.2E+10	OSF	
9. RANGE UNFOLDING OVERLAY THRESHOLD (TOVER)	DB	0.0000	20.0000	URC	"5" Recommended
10. NUMBER 1/4KM BINS CORRUPTED DATA AT END SWEEP	4 BINS	1	10	OSF	
11. TWO WAY ATMOSPHERIC LOSS/KM (-1.0 TO -.5 DEG)	-0.0150 DB/KM	-0.0200	-0.0020	OSF	
12. TWO WAY ATMOSPHERIC LOSS/KM (-0.5 TO 0.0 DEG)	-0.0150 DB/KM	-0.0200	-0.0020	OSF	
13. TWO WAY ATMOSPHERIC LOSS/KM (0.0 TO 0.5 DEG)	-0.0120 DB/KM	-0.0200	-0.0020	OSF	
14. TWO WAY ATMOSPHERIC LOSS/KM (0.5 TO 1.0 DEG)	-0.0110 DB/KM	-0.0200	-0.0020	OSF	
15. TWO WAY ATMOSPHERIC LOSS/KM (1.0 TO 1.5 DEG)	-0.0100 DB/KM	-0.0200	-0.0020	OSF	
16. TWO WAY ATMOSPHERIC LOSS/KM (1.5 TO 2.0 DEG)	-0.0090 DB/KM	-0.0200	-0.0020	OSF	
17. TWO WAY ATMOSPHERIC LOSS/KM (2.0 TO 2.5 DEG)	-0.0080 DB/KM	-0.0200	-0.0020	OSF	
18. TWO WAY ATMOSPHERIC LOSS/KM (2.5 TO 3.0 DEG)	-0.0070 DB/KM	-0.0200	-0.0020	OSF	
19. TWO WAY ATMOSPHERIC LOSS/KM (3.0 TO 3.5 DEG)	-0.0060 DB/KM	-0.0200	-0.0020	OSF	
20. TWO WAY ATMOSPHERIC LOSS/KM (3.5 TO 4.0 DEG)	-0.0060 DB/KM	-0.0200	-0.0020	OSF	
21. TWO WAY ATMOSPHERIC LOSS/KM (4.0 TO 4.5 DEG)	-0.0050 DB/KM	-0.0200	-0.0020	OSF	
22. TWO WAY ATMOSPHERIC LOSS/KM (4.5 TO 5.0 DEG)	-0.0050 DB/KM	-0.0200	-0.0020	OSF	
23. TWO WAY ATMOSPHERIC LOSS/KM (> 5.0 DEG)	-0.0050 DB/KM	-0.0200	-0.0020	OSF	
24. RCVR NOISE NORMALIZATION (-1.0 TO -.5 DEG)	RATIO	1.0000	1.8000	OSF	Note 1
25. RCVR NOISE NORMALIZATION (-0.5 TO 0.0 DEG)	RATIO	1.0000	1.8000	OSF	Note 1
26. RCVR NOISE NORMALIZATION (0.0 TO 0.5 DEG)	RATIO	1.0000	1.8000	OSF	Note 1
27. RCVR NOISE NORMALIZATION (0.5 TO 1.0 DEG)	RATIO	1.0000	1.8000	OSF	Note 1
28. RCVR NOISE NORMALIZATION (1.0 TO 1.5 DEG)	RATIO	1.0000	1.8000	OSF	Note 1
29. RCVR NOISE NORMALIZATION (1.5 TO 2.0 DEG)	RATIO	1.0000	1.8000	OSF	Note 1
30. RCVR NOISE NORMALIZATION (2.0 TO 2.5 DEG)	RATIO	1.0000	1.8000	OSF	Note 1

Table 3-3

## SPS ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
31. RCVR NOISE NORMALIZATION (2.5 TO 3.0 DEG)	RATIO	1.0000	1.8000	OSF	Note 1
32. RCVR NOISE NORMALIZATION (3.0 TO 3.5 DEG)	RATIO	1.0000	1.8000	OSF	Note 1
33. RCVR NOISE NORMALIZATION (3.5 TO 4.0 DEG)	RATIO	1.0000	1.8000	OSF	Note 1
34. RCVR NOISE NORMALIZATION (4.0 TO 4.5 DEG)	RATIO	1.0000	1.8000	OSF	Note 1
35. RCVR NOISE NORMALIZATION (4.5 TO 5.0 DEG)	RATIO	1.0000	1.8000	OSF	Note 1
36. RCVR NOISE NORMALIZATION (> 5.0 DEG)	RATIO	1.0000	1.8000	OSF	Note 1
37. DPLR CLTR FLTR NCHWD LOW SUPPR(<= 4 DEG/S)	0.5000 M/SEC	0.5000	3.9375	OSF	
38. DPLR CLTR FLTR NCHWD LOW SUPPR(> 4, 6 DEG/S)	0.5000 M/SEC	0.5000	3.9375	OSF	
39. DPLR CLTR FLTR NCHWD LOW SUPPR(> 6, 8 DEG/S)	0.5625 M/SEC	0.5000	3.9375	OSF	
40. DPLR CLTR FLTR NCHWD LOW SUPPR(> 8,10 DEG/S)	0.6875 M/SEC	0.5000	3.9375	OSF	
41. DPLR CLTR FLTR NCHWD LOW SUPPR(>10,12 DEG/S)	0.7500 M/SEC	0.5000	3.9375	OSF	
42. DPLR CLTR FLTR NCHWD LOW SUPPR(>12,14 DEG/S)	0.8750 M/SEC	0.5000	3.9375	OSF	
43. DPLR CLTR FLTR NCHWD LOW SUPPR(>14,16 DEG/S)	0.9375 M/SEC	0.5000	3.9375	OSF	
44. DPLR CLTR FLTR NCHWD LOW SUPPR(>16,18 DEG/S)	1.0625 M/SEC	0.5000	3.9375	OSF	
45. DPLR CLTR FLTR NCHWD LOW SUPPR(>18,20 DEG/S)	1.1875 M/SEC	0.5000	3.9375	OSF	
46. DPLR CLTR FLTR NCHWD LOW SUPPR(>20,22 DEG/S)	1.3125 M/SEC	0.5000	3.9375	OSF	
47. DPLR CLTR FLTR NCHWD LOW SUPPR(>22,24 DEG/S)	1.3750 M/SEC	0.5000	3.9375	OSF	
48. DPLR CLTR FLTR NCHWD LOW SUPPR(>24,26 DEG/S)	1.5000 M/SEC	0.5000	3.9375	OSF	
49. DPLR CLTR FLTR NCHWD LOW SUPPR(>26,28 DEG/S)	1.5625 M/SEC	0.5000	3.9375	OSF	
50. DPLR CLTR FLTR NCHWD LOW SUPPR(>28,30 DEG/S)	1.6875 M/SEC	0.5000	3.9375	OSF	
51. DPLR CLTR FLTR NCHWD LOW SUPPR(>30,32 DEG/S)	1.7500 M/SEC	0.5000	3.9375	OSF	
52. DPLR CLTR FLTR NCHWD LOW SUPPR(>32,34 DEG/S)	1.8750 M/SEC	0.5000	3.9375	OSF	
53. DPLR CLTR FLTR NCHWD LOW SUPPR(> 34 DEG/S)	2.0625 M/SEC	0.5000	3.9375	OSF	
54. DPLR CLTR FLTR NCHWD MED SUPPR(<= 4 DEG/S)	0.6250 M/SEC	0.5000	3.9375	OSF	
55. DPLR CLTR FLTR NCHWD MED SUPPR(> 4, 6 DEG/S)	0.6875 M/SEC	0.5000	3.9375	OSF	
56. DPLR CLTR FLTR NCHWD MED SUPPR(> 6, 8 DEG/S)	0.7500 M/SEC	0.5000	3.9375	OSF	
57. DPLR CLTR FLTR NCHWD MED SUPPR(> 8,10 DEG/S)	0.8750 M/SEC	0.5000	3.9375	OSF	
58. DPLR CLTR FLTR NCHWD MED SUPPR(>10,12 DEG/S)	1.0000 M/SEC	0.5000	3.9375	OSF	
59. DPLR CLTR FLTR NCHWD MED SUPPR(>12,14 DEG/S)	1.0625 M/SEC	0.5000	3.9375	OSF	
60. DPLR CLTR FLTR NCHWD MED SUPPR(>14,16 DEG/S)	1.2500 M/SEC	0.5000	3.9375	OSF	

Table 3-3

## SPS ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
61. DPLR CLTR FLTR NCHWD MED SUPPR(>16,18 DEG/S)	1.4375 M/SEC	0.5000	3.9375	OSF	
62. DPLR CLTR FLTR NCHWD MED SUPPR(>18,20 DEG/S)	1.5625 M/SEC	0.5000	3.9375	OSF	
63. DPLR CLTR FLTR NCHWD MED SUPPR(>20,22 DEG/S)	1.6875 M/SEC	0.5000	3.9375	OSF	
64. DPLR CLTR FLTR NCHWD MED SUPPR(>22,24 DEG/S)	1.8750 M/SEC	0.5000	3.9375	OSF	
65. DPLR CLTR FLTR NCHWD MED SUPPR(>24,26 DEG/S)	2.0000 M/SEC	0.5000	3.9375	OSF	
66. DPLR CLTR FLTR NCHWD MED SUPPR(>26,28 DEG/S)	2.0625 M/SEC	0.5000	3.9375	OSF	
67. DPLR CLTR FLTR NCHWD MED SUPPR(>28,30 DEG/S)	2.1875 M/SEC	0.5000	3.9375	OSF	
68. DPLR CLTR FLTR NCHWD MED SUPPR(>30,32 DEG/S)	2.3125 M/SEC	0.5000	3.9375	OSF	
69. DPLR CLTR FLTR NCHWD MED SUPPR(>32,34 DEG/S)	2.3750 M/SEC	0.5000	3.9375	OSF	
70. DPLR CLTR FLTR NCHWD MED SUPPR(> 34 DEG/S)	2.5000 M/SEC	0.5000	3.9375	OSF	
71. DPLR CLTR FLTR NCHWD HIGH SUPPR(<= 4 DEG/S)	0.9375 M/SEC	0.5000	3.9375	OSF	
72. DPLR CLTR FLTR NCHWD HIGH SUPPR(> 4, 6 DEG/S)	0.9375 M/SEC	0.5000	3.9375	OSF	
73. DPLR CLTR FLTR NCHWD HIGH SUPPR(> 6, 8 DEG/S)	1.1250 M/SEC	0.5000	3.9375	OSF	
74. DPLR CLTR FLTR NCHWD HIGH SUPPR(> 8,10 DEG/S)	1.3750 M/SEC	0.5000	3.9375	OSF	
75. DPLR CLTR FLTR NCHWD HIGH SUPPR(>10,12 DEG/S)	1.5625 M/SEC	0.5000	3.9375	OSF	
76. DPLR CLTR FLTR NCHWD HIGH SUPPR(>12,14 DEG/S)	1.7500 M/SEC	0.5000	3.9375	OSF	
77. DPLR CLTR FLTR NCHWD HIGH SUPPR(>14,16 DEG/S)	2.0000 M/SEC	0.5000	3.9375	OSF	
78. DPLR CLTR FLTR NCHWD HIGH SUPPR(>16,18 DEG/S)	2.1250 M/SEC	0.5000	3.9375	OSF	
79. DPLR CLTR FLTR NCHWD HIGH SUPPR(>18,20 DEG/S)	2.3125 M/SEC	0.5000	3.9375	OSF	
80. DPLR CLTR FLTR NCHWD HIGH SUPPR(>20,22 DEG/S)	2.5000 M/SEC	0.5000	3.9375	OSF	
81. DPLR CLTR FLTR NCHWD HIGH SUPPR(>22,24 DEG/S)	2.6875 M/SEC	0.5000	3.9375	OSF	
82. DPLR CLTR FLTR NCHWD HIGH SUPPR(>24,26 DEG/S)	3.0000 M/SEC	0.5000	3.9375	OSF	
83. DPLR CLTR FLTR NCHWD HIGH SUPPR(>26,28 DEG/S)	3.1250 M/SEC	0.5000	3.9375	OSF	
84. DPLR CLTR FLTR NCHWD HIGH SUPPR(>28,30 DEG/S)	3.2500 M/SEC	0.5000	3.9375	OSF	
85. DPLR CLTR FLTR NCHWD HIGH SUPPR(>30,32 DEG/S)	3.3750 M/SEC	0.5000	3.9375	OSF	
86. DPLR CLTR FLTR NCHWD HIGH SUPPR(>32,34 DEG/S)	3.6250 M/SEC	0.5000	3.9375	OSF	
87. DPLR CLTR FLTR NCHWD HIGH SUPPR(> 34 DEG/S)	3.9375 M/SEC	0.5000	3.9375	OSF	
88. REFL CLTR FLTR NCHWD LOW SUPPR(<= 4 DEG/S)	0.5000 M/SEC	0.5000	3.9375	OSF	
89. REFL CLTR FLTR NCHWD LOW SUPPR(> 4, 6 DEG/S)	0.5000 M/SEC	0.5000	3.9375	OSF	
90. REFL CLTR FLTR NCHWD LOW SUPPR(> 6, 8 DEG/S)	0.5000 M/SEC	0.5000	3.9375	OSF	

Table 3-3

## SPS ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	Minimum	Maximum	<u>LOCA</u>	<u>Comments/TM Ref.</u>
	<u>Value</u>	<u>Value</u>			
91. REFL CLTR FLTR NCHWD LOW SUPPR(> 8,10 DEG/S)	0.5000	M/SEC	0.5000	3.9375	OSF
92. REFL CLTR FLTR NCHWD LOW SUPPR(>10,12 DEG/S)	0.5625	M/SEC	0.5000	3.9375	OSF
93. REFL CLTR FLTR NCHWD LOW SUPPR(>12,14 DEG/S)	0.6875	M/SEC	0.5000	3.9375	OSF
94. REFL CLTR FLTR NCHWD LOW SUPPR(>14,16 DEG/S)	0.7500	M/SEC	0.5000	3.9375	OSF
95. REFL CLTR FLTR NCHWD LOW SUPPR(>16,18 DEG/S)	0.8125	M/SEC	0.5000	3.9375	OSF
96. REFL CLTR FLTR NCHWD LOW SUPPR(>18,20 DEG/S)	0.8750	M/SEC	0.5000	3.9375	OSF
97. REFL CLTR FLTR NCHWD LOW SUPPR(>20,22 DEG/S)	1.0000	M/SEC	0.5000	3.9375	OSF
98. REFL CLTR FLTR NCHWD LOW SUPPR(>22,24 DEG/S)	1.0625	M/SEC	0.5000	3.9375	OSF
99. REFL CLTR FLTR NCHWD LOW SUPPR(>24,26 DEG/S)	1.1250	M/SEC	0.5000	3.9375	OSF
100. REFL CLTR FLTR NCHWD LOW SUPPR(>26,28 DEG/S)	1.2500	M/SEC	0.5000	3.9375	OSF
101. REFL CLTR FLTR NCHWD LOW SUPPR(>28,30 DEG/S)	1.3125	M/SEC	0.5000	3.9375	OSF
102. REFL CLTR FLTR NCHWD LOW SUPPR(>30,32 DEG/S)	1.3750	M/SEC	0.5000	3.9375	OSF
103. REFL CLTR FLTR NCHWD LOW SUPPR(>32,34 DEG/S)	1.4375	M/SEC	0.5000	3.9375	OSF
104. REFL CLTR FLTR NCHWD LOW SUPPR(> 34 DEG/S)	1.5625	M/SEC	0.5000	3.9375	OSF
105. REFL CLTR FLTR NCHWD MED SUPPR(<= 4 DEG/S)	0.6250	M/SEC	0.5000	3.9375	OSF
106. REFL CLTR FLTR NCHWD MED SUPPR(> 4, 6 DEG/S)	0.6250	M/SEC	0.5000	3.9375	OSF
107. REFL CLTR FLTR NCHWD MED SUPPR(> 6, 8 DEG/S)	0.6875	M/SEC	0.5000	3.9375	OSF
108. REFL CLTR FLTR NCHWD MED SUPPR(> 8,10 DEG/S)	0.8125	M/SEC	0.5000	3.9375	OSF
109. REFL CLTR FLTR NCHWD MED SUPPR(>10,12 DEG/S)	0.9375	M/SEC	0.5000	3.9375	OSF
110. REFL CLTR FLTR NCHWD MED SUPPR(>12,14 DEG/S)	1.0625	M/SEC	0.5000	3.9375	OSF
111. REFL CLTR FLTR NCHWD MED SUPPR(>14,16 DEG/S)	1.1875	M/SEC	0.5000	3.9375	OSF
112. REFL CLTR FLTR NCHWD MED SUPPR(>16,18 DEG/S)	1.2500	M/SEC	0.5000	3.9375	OSF
113. REFL CLTR FLTR NCHWD MED SUPPR(>18,20 DEG/S)	1.2500	M/SEC	0.5000	3.9375	OSF
114. REFL CLTR FLTR NCHWD MED SUPPR(>20,22 DEG/S)	1.2500	M/SEC	0.5000	3.9375	OSF
115. REFL CLTR FLTR NCHWD MED SUPPR(>22,24 DEG/S)	1.2500	M/SEC	0.5000	3.9375	OSF
116. REFL CLTR FLTR NCHWD MED SUPPR(>24,26 DEG/S)	1.2500	M/SEC	0.5000	3.9375	OSF
117. REFL CLTR FLTR NCHWD MED SUPPR(>26,28 DEG/S)	1.2500	M/SEC	0.5000	3.9375	OSF
118. REFL CLTR FLTR NCHWD MED SUPPR(>28,30 DEG/S)	1.2500	M/SEC	0.5000	3.9375	OSF
119. REFL CLTR FLTR NCHWD MED SUPPR(>30,32 DEG/S)	1.2500	M/SEC	0.5000	3.9375	OSF
120. REFL CLTR FLTR NCHWD MED SUPPR(>32,34 DEG/S)	1.2500	M/SEC	0.5000	3.9375	OSF

Table 3-3

## SPS ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
121. REFL CLTR FLTR NCHWD MED SUPPR(> 34 DEG/S)	1.2500 M/SEC	0.5000	3.9375	OSF	
122. REFL CLTR FLTR NCHWD HIGH SUPPR(<= 4 DEG/S)	0.9375 M/SEC	0.5000	3.9375	OSF	
123. REFL CLTR FLTR NCHWD HIGH SUPPR(> 4, 6 DEG/S)	1.0000 M/SEC	0.5000	3.9375	OSF	
124. REFL CLTR FLTR NCHWD HIGH SUPPR(> 6, 8 DEG/S)	1.0000 M/SEC	0.5000	3.9375	OSF	
125. REFL CLTR FLTR NCHWD HIGH SUPPR(> 8,10 DEG/S)	1.1875 M/SEC	0.5000	3.9375	OSF	
126. REFL CLTR FLTR NCHWD HIGH SUPPR(>10,12 DEG/S)	1.3125 M/SEC	0.5000	3.9375	OSF	
127. REFL CLTR FLTR NCHWD HIGH SUPPR(>12,14 DEG/S)	1.4375 M/SEC	0.5000	3.9375	OSF	
128. REFL CLTR FLTR NCHWD HIGH SUPPR(>14,16 DEG/S)	1.5000 M/SEC	0.5000	3.9375	OSF	
129. REFL CLTR FLTR NCHWD HIGH SUPPR(>16,18 DEG/S)	1.6250 M/SEC	0.5000	3.9375	OSF	
130. REFL CLTR FLTR NCHWD HIGH SUPPR(>18,20 DEG/S)	1.7500 M/SEC	0.5000	3.9375	OSF	
131. REFL CLTR FLTR NCHWD HIGH SUPPR(>20,22 DEG/S)	1.8750 M/SEC	0.5000	3.9375	OSF	
132. REFL CLTR FLTR NCHWD HIGH SUPPR(>22,24 DEG/S)	2.0000 M/SEC	0.5000	3.9375	OSF	
133. REFL CLTR FLTR NCHWD HIGH SUPPR(>24,26 DEG/S)	2.1250 M/SEC	0.5000	3.9375	OSF	
134. REFL CLTR FLTR NCHWD HIGH SUPPR(>26,28 DEG/S)	2.2500 M/SEC	0.5000	3.9375	OSF	
135. REFL CLTR FLTR NCHWD HIGH SUPPR(>28,30 DEG/S)	2.3750 M/SEC	0.5000	3.9375	OSF	
136. REFL CLTR FLTR NCHWD HIGH SUPPR(>30,32 DEG/S)	2.5000 M/SEC	0.5000	3.9375	OSF	
137. REFL CLTR FLTR NCHWD HIGH SUPPR(>32,34 DEG/S)	2.5000 M/SEC	0.5000	3.9375	OSF	
138. REFL CLTR FLTR NCHWD HIGH SUPPR(> 34 DEG/S)	2.5000 M/SEC	0.5000	3.9375	OSF	
139. HIGH/LOW CLUTTER MAP BOUNDARY ELEVATION	2.0000 DEGREES	0.5000	3.0000	OSF	Note 2
140. NCHWD MAP NUMBER OF RANGE ZONES IN EL SEG 1	3 ZONES	1	3	OSF	
141. SEG1,Z1 OPR SEL CODE (0=BYPFL,1=BYPMAP,2=FFL)	2	0	2	OSF	
142. NOTCH WIDTH MAP SEG1, ZONE1 STOP RANGE	2 KM	0	511	OSF	
143. SEG1, Z1 DPLR DATA SUPPR LEVEL (1=L,2=M,3=H)	3	0	3	OSF	
144. SEG1, Z1 SURV DATA SUPPR LEVEL (1=L,2=M,3=H)	3	0	3	OSF	
145. SEG1,Z2 OPR SEL CODE (0=BYPFL,1=BYPMAP,2=FFL)	1	0	2	OSF	
146. NOTCH WIDTH MAP SEG1, ZONE2 STOP RANGE	4 KM	0	511	OSF	
147. SEG1, Z2 DPLR DATA SUPPR LEVEL (1=L,2=M,3=H)	3	0	3	OSF	
148. SEG1, Z2 SURV DATA SUPPR LEVEL (1=L,2=M,3=H)	2	0	3	OSF	
149. SEG1,Z3 OPR SEL CODE (0=BYPFL,1=BYPMAP,2=FFL)	1	0	2	OSF	
150. NOTCH WIDTH MAP SEG1, ZONE3 STOP RANGE	510 KM	0	511	OSF	

Table 3-3

## SPS ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
151. SEG1, Z3 DPLR DATA SUPPR LEVEL (1=L,2=M,3=H)	3	0	3	OSF	
152. SEG1, Z3 SURV DATA SUPPR LEVEL (1=L,2=M,3=H)	2	0	3	OSF	
153. NCHWD MAP NUMBER OF RANGE ZONES IN EL SEG 2	3 ZONES	1	3	OSF	
154. SEG2,Z1 OPR SEL CODE (0=BYPFL,1=BYPMAP,2=FFL)	2	0	2	OSF	
155. NOTCH WIDTH MAP SEG2, ZONE1 STOP RANGE	2 KM	0	511	OSF	
156. SEG2, Z1 DPLR DATA SUPPR LEVEL (1=L,2=M,3=H)	3	0	3	OSF	
157. SEG2, Z1 SURV DATA SUPPR LEVEL (1=L,2=M,3=H)	2	0	3	OSF	
158. SEG2,Z2 OPR SEL CODE (0=BYPFL,1=BYPMAP,2=FFL)	1	0	2	OSF	
159. NOTCH WIDTH MAP SEG2, ZONE2 STOP RANGE	10 KM	0	511	OSF	
160. SEG2, Z2 DPLR DATA SUPPR LEVEL (1=L,2=M,3=H)	3	0	3	OSF	
161. SEG2, Z2 SURV DATA SUPPR LEVEL (1=L,2=M,3=H)	2	0	3	OSF	
162. SEG2,Z3 OPR SEL CODE (0=BYPFL,1=BYPMAP,2=FFL)	1	0	2	OSF	
163. NOTCH WIDTH MAP SEG2, ZONE3 STOP RANGE	510 KM	0	511	OSF	
164. SEG2, Z3 DPLR DATA SUPPR LEVEL (1=L,2=M,3=H)	3	0	3	OSF	
165. SEG2, Z3 SURV DATA SUPPR LEVEL (1=L,2=M,3=H)	2	0	3	OSF	
166. SIGNAL PROCESSOR 5 V POWER SUPPLY TOLERANCE	10.0000 PERCENT	0.0000	20.0000	OSF	
167. LINEAR CHANNEL CLUTTER SUPPR DEGRADE LIMIT	35.0000 DB	35.0000	50.0000	OSF	
168. LINEAR CHANNEL CLUTTER SUPPR MAINT LIMIT	40.0000 DB	20.0000	50.0000	OSF	
169. LOG CHANNEL CLUTTER SUPPR DEGRADE LIMIT	35.0000 DB	0.0000	50.0000	OSF	
170. LOG CHANNEL CLUTTER SUPPR MAINTENANCE LIMIT	40.0000 DB	0.0000	50.0000	OSF	
171. VELOCITY CHECK DELTA DEGRADE LIMIT	2.0000 M/SEC	0.5000	2.0000	OSF	
172. VELOCITY CHECK DELTA MAINTENANCE LIMIT	1.0000 M/SEC	0.5000	2.0000	OSF	
173. SPECTRUM WIDTH CHECK DELTA DEGRADE LIMIT	2.0000 M/SEC	0.5000	2.0000	OSF	
174. SPECTRUM WIDTH CHECK DELTA MAINTENANCE LIMIT	1.0000 M/SEC	0.5000	2.0000	OSF	
175. NC KILL BATCH VALUE	12 CELLS			OSF	
176. NC KILL DOPPLER W/AMBIGUITY RESOLUTION VALUE	12 CELLS	0	20	OSF	

**NOTES:**

1. These values are site-specific and are calculated/entered during INCO. At this time, it does not appear that there would be any reason to change these values. Thus, the values should be left as entered upon system acceptance.
2. This value may also be shown as "2.0215" which is a Build 8.0 "software-converted" value.

Table 3-4

## TRANSMITTER ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
1. TRANSMITTER SPECTRUM FILTER INSTALLED		F	T	OSF	As Installed
2. LINEAR POLARIZATION INSTALLED FLAG	T	F	T	OSF	
3. TRANSMITTER FREQUENCY	MHZ	2700.000	3000.0000	OSF	As Installed
4. SITE PRF SET (A=1,B=2,C=3,D=4,E=5)		1	5	OSF	As Installed
5. PULSE WIDTH OF XMTR OUTPUT IN SHORT PULSE	NSEC	1000	2000	OSF/TM	6-511, 7.8.5.6
6. PULSE WIDTH OF XMTR OUTPUT IN LONG PULSE	NSEC	3000	6000	OSF/TM	6-511, 7.8.5.6
7. RF DRIVE PULSE WIDTH IN SHORT PULSE MODE	NSEC	500	2000	OSF/TM	6-511, 7.8.5.6
8. RF DRIVE PULSE WIDTH IN LONG PULSE MODE	NSEC	3000	6000	OSF/TM	6-511, 7.8.5.6
9. SCALE FACTOR TO CONVERT XMTR POWER BITE DATA	WATTS/LSB	0.1000E-04	0.1500E-02	OSF/TM	6-511, 7.8.5.10.4
10. SCALE FACTOR TO CONVERT ANT POWER BITE DATA	WATTS/LSB	0.1000E-04	0.1500E-02	OSF/TM	6-511, 7.8.5.10.4
11. TOLERANCE FOR CHECKING XMTR/ANT POWER RATIO	1.0000	DB	0.0000	5.0000	OSF
12. RF POWER MEASUREMENT SMOOTHING COEFFICIENT	0.3330	RATIO	0.0500	1.0000	OSF
13. MINIMUM TRANSMITTER PEAK POWER ALARM LEVEL	400.0000	KW	200.0000	700.0000	OSF
14. MAXIMUM TRANSMITTER PEAK POWER ALARM LEVEL	900.0000	KW	500.0000	950.0000	OSF
15. MINIMUM ANTENNA PEAK POWER ALARM LEVEL	238.0000	KW	200.0000	700.0000	OSF
16. MAXIMUM ANTENNA PEAK POWER ALARM LEVEL	625.0000	KW	500.0000	950.0000	OSF
17. PATH LOSS - A6 ARC DETECTOR	-0.0500	DB	-0.5000	-0.0100	OSF/TM 6-510, 6-6.35.3 (Draft)
18. PATH LOSS - WG02 HARMONIC FILTER	-0.1500	DB	-0.5000	-0.0500	OSF/TM Note 2
19. PATH LOSS - WG04 CIRCULATOR	-0.1500	DB	-0.5000	-0.0500	OSF/TM Note 2
20. PATH LOSS - WG06 SPECTRUM FILTER	0.0000	DB	-0.5000	0.0000	OSF/TM Note 3
21. PATH LOSS - WAVEGUIDE KLYSTRON TO SWITCH		DB	-1.0000	-0.0100	OSF/TM 6-510, 6-6.35.3 (Draft)
22. PATH LOSS - 1DC1 XMTR COUPLER STRAIGHT THRU	-0.0500	DB	-0.1000	-0.0100	OSF/TM 6-510, 6-6.35.3 (Draft)
23. PATH LOSS - 1DC1 XMTR COUPLER COUPLING		DB	-40.0000	-20.0000	OSF/TM 6-511, 7.8.5.10.2
24. PATH LOSS - WAVEGUIDE SWITCH	-0.0500	DB	-1.0000	-0.1000	OSF/TM Note 4
25. PATH LOSS - WG SWITCH TO AZ ROTARY JOINT		DB	-1.8000	-0.0500	OSF/TM 6-510, 6-6.35.4 (Draft)
26. PATH LOSS - 2A1A4 WG CHANNEL AZ ROTARY JOINT	-0.0500	DB	-0.5000	-0.0500	OSF/TM 6-510, 6-6.35.5 (Draft)
27. PATH LOSS - WAVEGUIDE AZ JOINT TO EL JOINT		DB	-0.5000	-0.0500	OSF/TM 6-510, 6-6.35.5 (Draft)
28. PATH LOSS - A5 ELEVATION ROTARY JOINT	-0.0500	DB	-0.5000	-0.0500	OSF/TM 6-510, 6-6.35.5 (Draft)
29. PATH LOSS - 2DC1 ANT COUPLER STRAIGHT THRU	-0.1000	DB	-0.1000	0.0100	OSF/TM 6-510, 6-6.35.5 (Draft)
30. PATH LOSS - 2DC1 ANT COUPLER COUPLING		DB	-55.0000	-40.0000	OSF/TM 6-510, 6-6.35.5 (Draft)

Table 3-4

## TRANSMITTER ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>		<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
31. PATH LOSS - WAVEGUIDE COUPLER TO ANTENNA	-0.1000	DB	-1.0000	-0.1000	OSF	
32. PATH LOSS - 1AT4 TRANSMITTER COUPLER PAD		DB	-6.0000	0.0000	OSF/TM	6-511, 7.8.5.10.2
33. PATH LOSS - 2AT1 ANTENNA COUPLER PAD		DB	-9.0000	-2.5000	OSF/TM	6-510, 6-6.35.5 (Draft)
34. PATH LOSS - T/R CIRCULATOR - PORT 2 TO PORT 3	-0.2000	DB	-0.5000	0.0000	OSF	Note 5

- NOTES:**
1. In some cases, this table will show a "fixed" value even though a technical manual reference is listed indicating that a site-specific measurement is required. In these cases, the "fixed" value is used as default values when certain waveguide path loss measurements are made in series.
  2. The normal default value is "-0.1500". However, EHB 6-510, Paragraph 6-6.35.3 may indicate to reset these to "-0.1000" to facilitate proper calculation of TR21.
  3. This value will be "-0.2000" if a spectrum filter is installed. Used in EHB 6-510, Paragraph 6-6.35.3.
  4. This value will be "-0.1000" for redundant systems. Used in EHB 6-510, Paragraph 6-6.35.3.
  5. This value will be "-0.2500" for redundant systems.

Table 3-5

## RECEIVER ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
1. ISU CONFIGURED		F	T	OSF	As Installed
2. REFLECTIVITY AND CLUTTER SUPPR TEST INTERVAL	8 HOURS	2	72	OSF	
3. NORMAL LINEAR CHANNEL LONG PULSE SMPLG PHASE	10 CLOCK CNTS	0	15	OSF	
4. KLYSTR OUT TGT LIN CHAN LNG PULSE SMPLG PHASE	13 CLOCK CNTS	0	15	OSF	
5. RF DRIVE TGT LIN CHAN LONG PULSE SMPLG PHASE	10 CLOCK CNTS	0	15	OSF	
6. NORMAL LINEAR CHANNEL SHORT PULSE SMPLG PHASE	10 CLOCK CNTS	0	15	OSF	
7. KLYSTR OUT TGT LIN CHAN SHT PULSE SMPLG PHASE	CLOCK CNTS	0	15	OSF/TM	6-510, 6-6.28.3.5
8. RF DRIVE TGT LIN CHAN SHORT PULSE SMPLG PHASE	10 CLOCK CNTS	0	15	OSF	
9. NORMAL LOG CHANNEL LONG PULSE SAMPLING PHASE	12 CLOCK CNTS	0	31	OSF	
10. KLYSTR OUT TGT LOG CHAN LNG PULSE SMPLG PHASE	21 CLOCK CNTS	0	31	OSF	
11. RF DRIVE TGT LOG CHAN LONG PULSE SMPLG PHASE	11 CLOCK CNTS	0	31	OSF	
12. NORMAL LOG CHANNEL SHORT PULSE SAMPLING PHASE	7 CLOCK CNTS	0	31	OSF	
13. KLYSTR OUT TGT LOG CHAN SHT PULSE SMPLG PHASE	CLOCK CNTS	0	31	OSF/TM	Note 1
14. RF DRIVE TGT LOG CHAN SHORT PULSE SMPLG PHASE	6 CLOCK CNTS	0	31	OSF	
15. BIN NUMBER FOR KLYSTRON OUT TARGET LONG PULSE	9 1/4 KM BIN	4	12	OSF	
16. BIN NUMBER FOR KLYSTRON OUT TARGET SHT PULSE	8 1/4 KM BIN	4	12	OSF	
17. TRUE RANGE AT START OF FIRST RANGE BIN	-0.5000 KM	-1.5000	0.0000	OSF	
18. RECEIVER TEST A/D SCALE FACTOR	2.0000 VOLTS	0.9000	4.0000	OSF	
19. A12 MAIN LOG AMPLIFIER DETECTOR SCALE	0.0063 VOLTS/DBM	0.0010	0.1000	OSF	
20. A30 IF LOG DETECTOR SCALE	0.0300 VOLTS/DBM	0.0010	0.1000	OSF	
21. A29 RF DETECTOR LOG AMPLIFIER SCALE	0.0500 VOLTS/DBM	0.0010	0.1000	OSF	
22. A18 GUARD + LOG AMPLIFIER DETECTOR SCALE	0.0250 VOLTS/DBM	0.0010	0.1000	OSF	
23. A17 GUARD - LOG AMPLIFIER DETECTOR SCALE	0.0250 VOLTS/DBM	0.0010	0.1000	OSF	
24. BIAS FOR A12 MAIN LOG AMPLIFIER DETECTOR	0.6625 VOLTS	0.0000	5.0000	OSF	
25. BIAS FOR A30 IF LOG DETECTOR	2.7000 VOLTS	0.0000	5.0000	OSF	
26. BIAS FOR A29 RF DETECTOR LOG AMPLIFIER	2.5000 VOLTS	0.0000	5.0000	OSF	
27. BIAS FOR A18 GUARD + LOG AMPLIFIER DETECTOR	2.6500 VOLTS	0.0000	5.0000	OSF	
28. BIAS FOR A17 GUARD - LOG AMPLIFIER DETECTOR	2.6500 VOLTS	0.0000	5.0000	OSF	
29. GAIN FOR A12 MAIN LOG AMPLIFIER DETECTOR	2.7000 RATIO	0.4000	5.0000	OSF	
30. GAIN FOR A30 IF LOG DETECTOR	0.7000 RATIO	0.4000	5.0000	OSF	

Table 3-5

## RECEIVER ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	Minimum <u>Value</u>	Maximum <u>Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
31. GAIN FOR A29 RF DETECTOR LOG AMPLIFIER	0.7540 RATIO	0.4000	5.0000	OSF	
32. GAIN FOR A18 GUARD + LOG AMPLIFIER DETECTOR	0.7130 RATIO	0.4000	5.0000	OSF	
33. GAIN FOR A17 GUARD - LOG AMPLIFIER DETECTOR	0.7130 RATIO	0.4000	5.0000	OSF	
34. CW TEST SIGNAL AT A22J3	DBM	20.0000	30.0000	OSF/TM	6-510, 6-6.28.3.1
35. RF NOISE TEST SIGNAL ENR AT A22J4	DB	45.0000	80.0000	OSF/TM	6-510, 6-6.28.3.3
36. RF DRIVE TEST SIGNAL LONG PULSE AT 3A5J4	DBM	19.0000	28.0000	OSF/TM	6-511, 7.8.5.6
37. RF DRIVE TEST SIGNAL SHORT PULSE AT 3A5J4	DBM	19.0000	28.0000	OSF/TM	6-511, 7.8.5.6
38. COHO POWER AT A10J2	DBM	23.0000	29.0000	OSF/TM	6-510, 6-6.23.3
39. STALO POWER AT A5J2	DBM	12.0000	18.0000	OSF/TM	6-510, 6-6.23.3
40. MATCHED FILTER LOSS FOR LONG PULSE	-1.9300 DB	-3.0000	-1.0000	OSF	
41. MATCHED FILTER LOSS FOR SHORT PULSE	-1.5600 DB	-3.0000	-1.0000	OSF	
42. MISC CALIBRATION LOSS LONG PULSE CW TARGET	0.0000 DB	-10.0000	0.0000	OSF	
43. MISC CAL LOSS LONG PULSE RF DRIVE TARGET	DB	-20.0000	0.0000	OSF/TM	6-510, 6-6.28.2.1
44. MISC CAL LOSS LONG PULSE KLYSTRON OUT TARGET	DB	-16.0000	0.0000	OSF/TM	6-510, 6-6.28.3.5
45. MISC CALIBRATION LOSS SHORT PULSE CW TARGET	0.0000 DB	-10.0000	0.0000	OSF	
46. MISC CAL LOSS SHORT PULSE RF DRIVE TARGET	DB	-20.0000	0.0000	OSF/TM	6-510, 6-6.28.2.1
47. MISC CAL LOSS SHORT PULSE KLYSTRON OUT TARGET	DB	-16.0000	0.0000	OSF/TM	6-510, 6-6.28.3.5
48. PATH LOSS - COAX XMTR RF SAMPLE TO A33 PAD	DB	-3.0000	0.4000	OSF/TM	6-511, 7.8.5.10.3
49. PATH LOSS - A33 PAD	DB	-10.0000	0.0000	OSF/TM	6-511, 7.8.5.10.3
50. PATH LOSS - A20J1_2 POWER SPLITTER	DB	-8.0000	-4.0000	OSF/TM	6-510, 6-6.28.3.5
51. PATH LOSS - A20J1_3 POWER SPLITTER	DB	-8.0000	-4.0000	OSF/TM	6-511, 7.8.5.10.3
52. PATH LOSS - A20J1_4 POWER SPLITTER	DB	-8.0000	-4.0000	OSF/TM	6-510, T6-6.14
53. PATH LOSS - A34 PAD	DB	-20.0000	0.0000	OSF/TM	6-510, 6-6.28.3.5
54. PATH LOSS - DC1 DIRECTIONAL COUPLER	DB	-45.0000	-35.0000	OSF/TM	6-510, T6-6.15
55. PATH LOSS - A21 RF DELAY LINE	DB	-60.0000	-40.0000	OSF/TM	6-510, 6-6.28.3.5
56. PATH LOSS - COAX XMTR RF DRIVE TO A22J2	DB	-5.0000	-0.5000	OSF/TM	6-510, 6-6.28.3.2
57. PATH LOSS - A22J1_5 FOUR POSITION TEST SWITCH	DB	9.0000	15.0000	OSF/TM	6-510, 6-6.28.3.5
58. PATH LOSS - A22J2_5 FOUR POSITION TEST SWITCH	DB	-5.0000	-0.5000	OSF/TM	6-510, 6-6.28.3.2
59. PATH LOSS - A22J3_5 FOUR POSITION TEST SWITCH	DB	-5.0000	-0.5000	OSF/TM	6-510, 6-6.28.3.1
60. PATH LOSS - A22J4_5 FOUR POSITION TEST SWITCH	DB	-5.0000	-0.5000	OSF/TM	6-510, T6-6.14

Table 3-5

## RECEIVER ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>	
61. PATH LOSS - A22J2_6 FOUR POSITION TEST SWITCH	DB	-35.0000	-25.0000	OSF/TM	6-510, T6-6.15	
62. PATH LOSS - A22J3_7 FOUR POSITION TEST SWITCH	DB	-35.0000	-25.0000	OSF/TM	6-510, T6-6.15	
63. PATH LOSS - A23J1_2 TEST ATTENUATOR	DB	-8.0000	-3.0000	OSF/TM	6-510, 6-6.28.3.1	
64. PATH LOSS - A23J1_3 TEST ATTENUATOR	DB	-35.0000	-25.0000	OSF/TM	6-510, T6-6.15	
65. PATH LOSS - A23J1_4 TEST ATTENUATOR	DB	-30.0000	-20.0000	OSF/TM	6-510, T6-6.15	
66. PATH LOSS - A24J1_2 TWO POSITION TEST SWITCH	DB	-5.0000	-0.5000	OSF/TM	6-510, 6-6.28.3.1	
67. PATH LOSS - A24J1_3 TWO POSITION TEST SWITCH	DB	-5.0000	-0.5000	OSF/TM	6-510, T6-6.14	
68. PATH LOSS - A24J1_4 TWO POSITION TEST SWITCH	DB	-25.0000	-15.0000	OSF/TM	6-510, T6-6.15	
69. PATH LOSS - TEST COAX TO PED AZ ROTARY JOINT	DB	-5.2000	-0.2000	OSF/TM	6-510, 6-6.28.3.1	
70. PATH LOSS - 2A1A4 AZ ROTARY JOINT CHAN 2 OR 4	0.0000	DB	-2.0000	0.0000	OSF	
71. PATH LOSS - TEST COAX AZ ROTARY JOINT TO RFE	0.0000	DB	-2.5000	0.0000	OSF	
72. PATH LOSS - 2A3J3/2A7J3 RCVR PROTR TEST CPLR		DB	-24.0000	-16.0000	OSF/TM	6-510, 6-6.28.3.1
73. PATH LOSS - 2A3J1_2/2A7J1_2 RCVR PROTECTOR		DB	-3.0000	-0.1000	OSF/TM	6-510, 6-6.28.3.1
74. PATH LOSS - 2A4J1_2/2A8J1_2 LOW NOISE AMPL		DB	24.0000	32.0000	OSF/TM	6-510, 6-6.28.3.1
75. PATH LOSS - RECEIVE COAX LNA TO AZ RTRY JOINT	0.0000	DB	-4.0000	0.0000	OSF	
76. PATH LOSS - 2A1A4 AZ ROTARY JOINT CHAN 3 OR 5	0.0000	DB	-2.0000	0.0000	OSF	
77. PATH LOSS - RCV COAX AZ RTRY JOINT TO A36 PAD		DB	-5.0000	-0.5000	OSF/TM	6-510, 6-6.28.3.1
78. PATH LOSS - A36 PAD		DB	-6.0000	0.0000	OSF/TM	6-510, T6-6.14
79. PATH LOSS - W103 COAX A24J3 TO DC2	0.0000	DB	-2.0000	0.0000	OSF	
80. PATH LOSS - DC2 DIRECTIONAL COUPLER		DB	-25.0000	-15.0000	OSF/TM	6-510, T6-6.14
81. PATH LOSS - A4 PRESELECT BANDPASS FILTER		DB	-3.5000	-0.5000	OSF/TM	6-510, T6-6.14
82. PATH LOSS - W102 RECEIVE COAX A4 TO A5	0.0000	DB	-0.5000	0.0000	OSF	
83. PATH LOSS - A5J1_3 MIXER PREAMPLIFIER		DB	15.0000	25.0000	OSF/TM	6-510, T6-6.14
84. PATH LOSS - A5J1_4 MIXER PREAMPLIFIER		DB	0.0000	10.0000	OSF/TM	6-510, T6-6.14
85. PATH LOSS - A5J1_5 MIXER PREAMPLIFIER		DB	-25.0000	15.0000	OSF/TM	6-510, T6-6.15
86. PATH LOSS - A5J1_7 MIXER PREAMPLIFIER		DB	-13.0000	-2.0000	OSF/TM	6-510, T6-6.15
87. PATH LOSS - A5J2_6 MIXER PREAMPLIFIER		DB	-35.0000	-25.0000	OSF/TM	6-510, T6-6.15
88. PATH LOSS - A6J1_2 RECEIVER MATCHED FILTER		DB	-15.0000	-5.0000	OSF/TM	6-510, T6-6.14
89. PATH LOSS - A6J1_3 RECEIVER MATCHED FILTER		DB	20.0000	-10.0000	OSF/TM	6-510, T6-6.14
90. PATH LOSS - A6J1_4 RECEIVER MATCHED FILTER		DB	-40.0000	-30.0000	OSF/TM	6-510, T6-6.15

Table 3-5

## RECEIVER ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
91. PATH LOSS - A7 IF DELAY LINE	DB	-11.0000	-1.0000	OSF/TM	6-510, T6-6.14
92. PATH LOSS - A8J1_2 IF ATTENUATOR	DB	-2.0000	5.0000	OSF/TM	6-510, T6-6.14
93. PATH LOSS - A8J1_3 IF ATTENUATOR	DB	-25.0000	-15.0000	OSF/TM	6-510, T6-6.15
94. PATH LOSS - A9J1_2 IF AMPLIFIER/LIMITER	DB	30.0000	50.0000	OSF/TM	6-510, T6-6.14
95. PATH LOSS - A9J1_3 IF AMPLIFIER/LIMITER	DB	-25.0000	-15.0000	OSF/TM	6-510, T6-6.15
96. PATH LOSS - A9J1_4 IF AMPLIFIER/LIMITER	DB	15.0000	25.0000	OSF/TM	6-510, T6-6.15
97. PATH LOSS - A10J2_3 I/Q PHASE DETECTOR	DB	-35.0000	-25.0000	OSF/TM	6-510, T6-6.15
98. PATH LOSS - PHASE DETECTOR INPUT TO A/D OUT	-10.2000	DB	-12.0000	-6.0000	OSF
99. PATH LOSS - A14J1_2 GRD BAND IF AMPL ASSEMBLY	DB	12.0000	29.0000	OSF/TM	6-510, T6-6.14
100. PATH LOSS - A14J1_3 GRD BAND IF AMPL ASSEMBLY	DB	12.0000	29.0000	OSF/TM	6-510, T6-6.14
101. PATH LOSS - A14J1_4 GRD BAND IF AMPL ASSEMBLY	DB	-8.0000	2.0000	OSF/TM	6-510, T6-6.15
102. PATH LOSS - A14J1_5 GRD BAND IF AMPL ASSEMBLY	DB	-8.0000	2.0000	OSF/TM	6-510, T6-6.15
103. PATH LOSS - A15J1_2 - GUARD BAND FILTER	-14.7500	DB	-16.0000	-11.0000	OSF
104. PATH LOSS - A15J1_3 - GUARD BAND FILTER	-35.0000	DB	-41.0000	-31.0000	OSF
105. PATH LOSS - A16J1_2 + GUARD BAND FILTER	-14.7500	DB	-17.0000	-12.0000	OSF
106. PATH LOSS - A16J1_3 + GUARD BAND FILTER	-35.0000	DB	-41.0000	-31.0000	OSF
107. PATH LOSS - A27 MULTI POS RF SELECT SWITCH	0.0000	DB	-1.0000	-0.0500	OSF
108. PATH LOSS - A28 MULTI POS IF SELECT SWITCH	0.0000	DB	-1.0000	-0.0500	OSF
109. PATH LOSS - A31_A RF/IF TEST MONITOR	2.7000	DB	2.0000	3.5000	OSF
110. PATH LOSS - A31_B RF/IF TEST MONITOR	0.7130	DB	0.5000	1.2000	OSF
111. PATH LOSS - A31_C RF/IF TEST MONITOR	0.7130	DB	0.5000	1.2000	OSF
112. PATH LOSS - A31_D RF/IF TEST MONITOR	0.7540	DB	0.5000	1.2000	OSF
113. PATH LOSS - A31_E RF/IF TEST MONITOR	0.7000	DB	0.5000	1.2000	OSF
114. TEST SIGNAL ATTENUATOR (STEP 0)	0.0000	DB	-1.0000	1.0000	OSF
115. TEST SIGNAL ATTENUATOR (STEP 1)		DB	-2.0000	0.0000	OSF/TM Note 2
116. TEST SIGNAL ATTENUATOR (STEP 2)		DB	-3.0000	-1.0000	OSF/TM Note 2
117. TEST SIGNAL ATTENUATOR (STEP 3)		DB	-4.0000	-2.0000	OSF/TM Note 2
118. TEST SIGNAL ATTENUATOR (STEP 4)		DB	-5.0000	-3.0000	OSF/TM Note 2
119. TEST SIGNAL ATTENUATOR (STEP 5)		DB	-6.0000	-4.0000	OSF/TM Note 2
120. TEST SIGNAL ATTENUATOR (STEP 6)		DB	-7.0000	-5.0000	OSF/TM Note 2

Table 3-5

## RECEIVER ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
121. TEST SIGNAL ATTENUATOR (STEP 7)	DB	-8.0000	-6.0000	OSF/TM	Note 2
122. TEST SIGNAL ATTENUATOR (STEP 8)	DB	-9.0000	-7.0000	OSF/TM	Note 2
123. TEST SIGNAL ATTENUATOR (STEP 9)	DB	-10.0000	-8.0000	OSF/TM	Note 2
124. TEST SIGNAL ATTENUATOR (STEP 10)	DB	-11.0000	-9.0000	OSF/TM	Note 2
125. TEST SIGNAL ATTENUATOR (STEP 11)	DB	-12.0000	-10.0000	OSF/TM	Note 2
126. TEST SIGNAL ATTENUATOR (STEP 12)	DB	-13.0000	-11.0000	OSF/TM	Note 2
127. TEST SIGNAL ATTENUATOR (STEP 13)	DB	-14.0000	-12.0000	OSF/TM	Note 2
128. TEST SIGNAL ATTENUATOR (STEP 14)	DB	-15.0000	-13.0000	OSF/TM	Note 2
129. TEST SIGNAL ATTENUATOR (STEP 15)	DB	-16.0000	-14.0000	OSF/TM	Note 2
130. TEST SIGNAL ATTENUATOR (STEP 16)	DB	-17.0000	-15.0000	OSF/TM	Note 2
131. TEST SIGNAL ATTENUATOR (STEP 17)	DB	-18.0000	-16.0000	OSF/TM	Note 2
132. TEST SIGNAL ATTENUATOR (STEP 18)	DB	-19.0000	-17.0000	OSF/TM	Note 2
133. TEST SIGNAL ATTENUATOR (STEP 19)	DB	-20.0000	-18.0000	OSF/TM	Note 2
134. TEST SIGNAL ATTENUATOR (STEP 20)	DB	-21.0000	-19.0000	OSF/TM	Note 2
135. TEST SIGNAL ATTENUATOR (STEP 21)	DB	-22.0000	-20.0000	OSF/TM	Note 2
136. TEST SIGNAL ATTENUATOR (STEP 22)	DB	-23.0000	-21.0000	OSF/TM	Note 2
137. TEST SIGNAL ATTENUATOR (STEP 23)	DB	-24.0000	-22.0000	OSF/TM	Note 2
138. TEST SIGNAL ATTENUATOR (STEP 24)	DB	-25.0000	-23.0000	OSF/TM	Note 2
139. TEST SIGNAL ATTENUATOR (STEP 25)	DB	-26.0000	-24.0000	OSF/TM	Note 2
140. TEST SIGNAL ATTENUATOR (STEP 26)	DB	-27.0000	-25.0000	OSF/TM	Note 2
141. TEST SIGNAL ATTENUATOR (STEP 27)	DB	-28.0000	-26.0000	OSF/TM	Note 2
142. TEST SIGNAL ATTENUATOR (STEP 28)	DB	-29.0000	-27.0000	OSF/TM	Note 2
143. TEST SIGNAL ATTENUATOR (STEP 29)	DB	-30.0000	-28.0000	OSF/TM	Note 2
144. TEST SIGNAL ATTENUATOR (STEP 30)	DB	-31.0000	-29.0000	OSF/TM	Note 2
145. TEST SIGNAL ATTENUATOR (STEP 31)	DB	-32.0000	-30.0000	OSF/TM	Note 2
146. TEST SIGNAL ATTENUATOR (STEP 32)	DB	-33.0000	-31.0000	OSF/TM	6-510, 6-6.28.3.4
147. TEST SIGNAL ATTENUATOR (STEP 33)	DB	-34.0000	-32.0000	OSF/TM	6-510, 6-6.28.3.4
148. TEST SIGNAL ATTENUATOR (STEP 34)	DB	-35.0000	-33.0000	OSF/TM	6-510, 6-6.28.3.4
149. TEST SIGNAL ATTENUATOR (STEP 35)	DB	-36.0000	-34.0000	OSF/TM	6-510, 6-6.28.3.4
150. TEST SIGNAL ATTENUATOR (STEP 36)	DB	-37.0000	-35.0000	OSF/TM	6-510, 6-6.28.3.4

Table 3-5

## RECEIVER ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
151. TEST SIGNAL ATTENUATOR (STEP 37)	DB	-38.0000	-36.0000	OSF/TM	Note 2
152. TEST SIGNAL ATTENUATOR (STEP 38)	DB	-39.0000	-37.0000	OSF/TM	Note 2
153. TEST SIGNAL ATTENUATOR (STEP 39)	DB	-40.0000	-38.0000	OSF/TM	Note 2
154. TEST SIGNAL ATTENUATOR (STEP 40)	DB	-41.0000	-39.0000	OSF/TM	Note 2
155. TEST SIGNAL ATTENUATOR (STEP 41)	DB	-42.0000	-40.0000	OSF/TM	Note 2
156. TEST SIGNAL ATTENUATOR (STEP 42)	DB	-43.0000	-41.0000	OSF/TM	Note 2
157. TEST SIGNAL ATTENUATOR (STEP 43)	DB	-44.0000	-42.0000	OSF/TM	Note 2
158. TEST SIGNAL ATTENUATOR (STEP 44)	DB	-45.0000	-43.0000	OSF/TM	Note 2
159. TEST SIGNAL ATTENUATOR (STEP 45)	DB	-46.0000	-44.0000	OSF/TM	Note 2
160. TEST SIGNAL ATTENUATOR (STEP 46)	DB	-47.0000	-45.0000	OSF/TM	Note 2
161. TEST SIGNAL ATTENUATOR (STEP 47)	DB	-48.0000	-46.0000	OSF/TM	Note 2
162. TEST SIGNAL ATTENUATOR (STEP 48)	DB	-49.0000	-47.0000	OSF/TM	Note 2
163. TEST SIGNAL ATTENUATOR (STEP 49)	DB	-50.0000	-48.0000	OSF/TM	6-510, 6-6.28.3.4
164. TEST SIGNAL ATTENUATOR (STEP 50)	DB	-51.5000	-48.5000	OSF/TM	6-510, 6-6.28.3.4
165. TEST SIGNAL ATTENUATOR (STEP 51)	DB	-52.5000	-49.5000	OSF/TM	6-510, 6-6.28.3.4
166. TEST SIGNAL ATTENUATOR (STEP 52)	DB	-53.5000	-50.5000	OSF/TM	6-510, 6-6.28.3.4
167. TEST SIGNAL ATTENUATOR (STEP 53)	DB	-54.5000	-51.5000	OSF/TM	6-510, 6-6.28.3.4
168. TEST SIGNAL ATTENUATOR (STEP 54)	DB	-55.5000	-52.5000	OSF/TM	6-510, 6-6.28.3.4
169. TEST SIGNAL ATTENUATOR (STEP 55)	DB	-56.5000	-53.5000	OSF/TM	6-510, 6-6.28.3.4
170. TEST SIGNAL ATTENUATOR (STEP 56)	DB	-57.5000	-54.5000	OSF/TM	Note 2
171. TEST SIGNAL ATTENUATOR (STEP 57)	DB	-58.5000	-55.5000	OSF/TM	Note 2
172. TEST SIGNAL ATTENUATOR (STEP 58)	DB	-59.5000	-56.5000	OSF/TM	Note 2
173. TEST SIGNAL ATTENUATOR (STEP 59)	DB	-60.5000	-57.5000	OSF/TM	Note 2
174. TEST SIGNAL ATTENUATOR (STEP 60)	DB	-61.5000	-58.5000	OSF/TM	Note 2
175. TEST SIGNAL ATTENUATOR (STEP 61)	DB	-62.5000	-59.5000	OSF/TM	Note 2
176. TEST SIGNAL ATTENUATOR (STEP 62)	DB	-63.5000	-60.5000	OSF/TM	Note 2
177. TEST SIGNAL ATTENUATOR (STEP 63)	DB	-64.5000	-61.5000	OSF/TM	Note 2
178. TEST SIGNAL ATTENUATOR (STEP 64)	DB	-65.5000	-62.5000	OSF/TM	Note 2
179. TEST SIGNAL ATTENUATOR (STEP 65)	DB	-66.5000	-63.5000	OSF/TM	Note 2
180. TEST SIGNAL ATTENUATOR (STEP 66)	DB	-67.5000	-64.5000	OSF/TM	6-510, 6-6.28.3.4

Table 3-5

## RECEIVER ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
181. TEST SIGNAL ATTENUATOR (STEP 67)	DB	-68.5000	-65.5000	OSF/TM	6-510, 6-6.28.3.4
182. TEST SIGNAL ATTENUATOR (STEP 68)	DB	-69.5000	-66.5000	OSF/TM	6-510, 6-6.28.3.4
183. TEST SIGNAL ATTENUATOR (STEP 69)	DB	-70.5000	-67.5000	OSF/TM	6-510, 6-6.28.3.4
184. TEST SIGNAL ATTENUATOR (STEP 70)	DB	-71.5000	-68.5000	OSF/TM	6-510, 6-6.28.3.4
185. TEST SIGNAL ATTENUATOR (STEP 71)	DB	-72.5000	-69.5000	OSF/TM	Note 2
186. TEST SIGNAL ATTENUATOR (STEP 72)	DB	-73.5000	-70.5000	OSF/TM	Note 2
187. TEST SIGNAL ATTENUATOR (STEP 73)	DB	-74.5000	-71.5000	OSF/TM	Note 2
188. TEST SIGNAL ATTENUATOR (STEP 74)	DB	-75.5000	-72.5000	OSF/TM	Note 2
189. TEST SIGNAL ATTENUATOR (STEP 75)	DB	-76.5000	-73.5000	OSF/TM	Note 2
190. TEST SIGNAL ATTENUATOR (STEP 76)	DB	-77.5000	-74.5000	OSF/TM	Note 2
191. TEST SIGNAL ATTENUATOR (STEP 77)	DB	-78.5000	-75.5000	OSF/TM	Note 2
192. TEST SIGNAL ATTENUATOR (STEP 78)	DB	-79.5000	-76.5000	OSF/TM	Note 2
193. TEST SIGNAL ATTENUATOR (STEP 79)	DB	-80.5000	-77.5000	OSF/TM	Note 2
194. TEST SIGNAL ATTENUATOR (STEP 80)	DB	-81.5000	-78.5000	OSF/TM	Note 2
195. TEST SIGNAL ATTENUATOR (STEP 81)	DB	-82.5000	-79.5000	OSF/TM	Note 2
196. TEST SIGNAL ATTENUATOR (STEP 82)	DB	-83.5000	-80.5000	OSF/TM	Note 2
197. TEST SIGNAL ATTENUATOR (STEP 83)	DB	-84.5000	-81.5000	OSF/TM	Note 2
198. TEST SIGNAL ATTENUATOR (STEP 84)	DB	-85.5000	-82.5000	OSF/TM	Note 2
199. TEST SIGNAL ATTENUATOR (STEP 85)	DB	-86.5000	-83.5000	OSF/TM	Note 2
200. TEST SIGNAL ATTENUATOR (STEP 86)	DB	-87.5000	-84.5000	OSF/TM	Note 2
201. TEST SIGNAL ATTENUATOR (STEP 87)	DB	-88.5000	-85.5000	OSF/TM	Note 2
202. TEST SIGNAL ATTENUATOR (STEP 88)	DB	-89.5000	-86.5000	OSF/TM	Note 2
203. TEST SIGNAL ATTENUATOR (STEP 89)	DB	-90.5000	-87.5000	OSF/TM	Note 2
204. TEST SIGNAL ATTENUATOR (STEP 90)	DB	-91.5000	-88.5000	OSF/TM	Note 2
205. TEST SIGNAL ATTENUATOR (STEP 91)	DB	-92.5000	-89.5000	OSF/TM	Note 2
206. TEST SIGNAL ATTENUATOR (STEP 92)	DB	-93.5000	-90.5000	OSF/TM	Note 2
207. TEST SIGNAL ATTENUATOR (STEP 93)	DB	-94.5000	-91.5000	OSF/TM	Note 2
208. TEST SIGNAL ATTENUATOR (STEP 94)	DB	-95.5000	-92.5000	OSF/TM	Note 2
209. TEST SIGNAL ATTENUATOR (STEP 95)	DB	-96.5000	-93.5000	OSF/TM	Note 2
210. TEST SIGNAL ATTENUATOR (STEP 96)	DB	-97.5000	-94.5000	OSF/TM	Note 2

Table 3-5

## RECEIVER ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
211. TEST SIGNAL ATTENUATOR (STEP 97)	DB	-98.5000	-95.5000	OSF/TM	Note 2
212. TEST SIGNAL ATTENUATOR (STEP 98)	DB	-99.5000	-96.5000	OSF/TM	Note 2
213. TEST SIGNAL ATTENUATOR (STEP 99)	DB	-100.5000	-97.5000	OSF/TM	Note 2
214. TEST SIGNAL ATTENUATOR (STEP 100)	DB	-101.5000	-98.5000	OSF/TM	Note 2
215. TEST SIGNAL ATTENUATOR (STEP 101)	DB	-102.5000	-99.5000	OSF/TM	Note 2
216. TEST SIGNAL ATTENUATOR (STEP 102)	DB	-103.5000	-100.5000	OSF/TM	Note 2
217. TEST SIGNAL ATTENUATOR (STEP 103)	DB	-104.5000	-101.5000	OSF/TM	Note 2
218. CVRSN FACTOR TO COMPUTE A/D BIAS CORRECTIONS	0.0625 RATIO	0.0500	0.2000	OSF	
219. RCVR NOISE CALIBRATION SMOOTHING COEFFICIENT	0.3300 RATIO	0.0500	1.0000	OSF	
220. LIN CHANNEL LP/SP RECEIVER NOISE RATIO	0.5000 RATIO	0.0000	1.0000	OSF	
221. LOG CHANNEL LP/SP RECEIVER NOISE RATIO	0.5000 RATIO	0.0000	1.0000	OSF	
222. RECEIVER NOISE LIN CHANNEL LOWER LIMIT	0.6000E-06 POWER	0.5000E-06	.5000E-05	OSF	
223. RECEIVER NOISE LIN CHANNEL UPPER LIMIT	0.7630E-05 POWER	0.1000E-05	0.1000E-04	OSF	
224. RECEIVER NOISE LOG CHANNEL LOWER LIMIT	0.6000E-06 POWER	0.1000E-08	0.1000E-03	OSF	
225. RECEIVER NOISE LOG CHANNEL UPPER LIMIT	0.7600E-04 POWER	0.1000E-08	0.1000E-03	OSF	
226. IDU NOISE TEST DEGRADE LIMIT	10 DET EVENTS	0	1000	OSF	
227. SYSTEM NOISE TEMP DEGRADE LIMIT FOR CTRL CHAN	800.0000 DEG KELVIN	450.0000	800.0000	OSF	
228. SYSTEM NOISE TEMP MAINT LIMIT FOR CTRL CHAN	700.0000 DEG KELVIN	400.0000	800.0000	OSF	
229. SYSTEM NOISE TEMP DEGRADE LIMIT NON-CTRL CHAN	1030.0000 DEG KELVIN	500.0000	1200.0000	OSF	
230. SYSTEM NOISE TEMP MAINT LIMIT NON-CTRL CHAN	930.0000 DEG KELVIN	500.0000	1200.0000	OSF	
231. TOLERANCE FOR AGC CALIBRATION SIGNALS	5.0000 DB	1.0000	10.0000	OSF	
232. IF ATTENUATOR STEP DEGRADE TOLERANCE	1.6 DB	0.1000	2.0	OSF	
233. IF ATTENUATOR STEP MAINT REQUIRED TOLERANCE	1.0 DB	0.1000	2.0000	OSF	
234. TARGET SYSCAL CONSTANT SHORT PULSE LIN CHAN	DB	5.0000	15.0000	OSF/TM	6-510, 6-6.28.2.1
235. TARGET SYSCAL CONSTANT SHORT PULSE LOG CHAN	DB	-10.0000	20.0000	OSF/TM	Note 3
236. TARGET SYSCAL INCREMENT IN LONG PULSE MODE	DB	-10.0000	0.0000	OSF/TM	6-510, 6-6.28.2.1
237. LIN CHAN TEST TGT CONSISTENCY DEGRADE LIMIT	2.0000 DB	1.0000	10.0000	OSF	
238. LIMIT FOR (COMPUTED - TGT) LINEAR CHAN SYSCAL	4.0000 DB	1.0000	10.0000	OSF	
239. LIN CHAN KLYSTR OUT TGT CONSISTENCY DEGR LIM	3.0000 DB	1.0000	10.0000	OSF	
240. LIN CHAN REFL CALIBRATION CHECK DEGRADE LIMIT	4.0000 DB	1.0000	10.0000	OSF	

**Table 3-5**  
**RECEIVER ADAPTATION**

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
241. LIN CHAN REFL CALIBRATION CHECK MAINT LIMIT	3.0000 DB	1.0000	10.0000	OSF	
242. LOG CHAN TEST TGT CONSISTENCY DEGRADE LIMIT	4.0000 DB	1.0000	10.0000	OSF	
243. LIMIT FOR (COMPUTED - TGT) LOG CHAN SYSCAL	5.0000 DB	1.0000	10.0000	OSF	
244. LOG CHAN KLYSTR OUT TGT CONSISTENCY DEGR LIM	3.0000 DB	1.0000	10.0000	OSF	
245. LOG CHAN REFL CALIBRATION CHECK DEGRADE LIMIT	4.0000 DB	1.0000	10.0000	OSF	
246. LOG CHAN REFL CALIBRATION CHECK MAINT LIMIT	3.0000 DB	1.0000	10.0000	OSF	
247. PATH LOSS - 2FL1/2FL2 EMI FILTER		-.60	0.00	OSF	
248. PATH LOSS - W900/W901 COAX TO EMI FILTER		-.50	0.00	OSF	

- NOTES:**
1. At present, there is no technical manual procedure for setting the sampling phase for the LOG Channel Klystron Output Target (R13). The INCO-determined value should work satisfactorily for the LOG channel. If not, the R13 value can be determined for the LOG channel in the same manner that R7 is determined for the LIN channel (EHB 6-510, Paragraph 6-6.28.3.5.2).
  2. EHB 6-510, Paragraph 6-6.28.3.4 presently only provides procedures for manually measuring the attenuator steps used in critical portions of the RDA on-line calibration routines (R146 through R150, R163 through R169, and R180 through R184). In software Build 10, a new program will be released (DYNRANGE) which will provide for automatic measurement/update of all 103 attenuator steps (R115 through R217). At that time, the technical manual will be updated to reflect use of the new program.
  3. At present, there is no technical manual procedure for determining the Short Pulse Target Syscal Constant for the LOG Channel since it is not significant. If desired, it can be set at the same time R234 is set by referencing the SHORT PULSE LOG CHAN SYSCAL at the end of the Reflectivity Error Evaluation and Correction procedure (EHB 6-510, Paragraph 6-6.28.2.1.3.1, steps 43 and 44).

Table 3-6

## WIDEBAND ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
1. RPG WB LINK TYPE(0=DIR,1=MWAVE,2=FBR OPT)		0	2	OSF	As Installed
2. RPG LOOP TEST INTERVAL	6 MINUTES	1	20	OSF	
3. USER WIDEBAND LINK INSTALLED	F			OSF	
4. USER WB LINK TYPE(0=DIR,1=MWAVE,2=FBR OPT)	0	0	2	OSF	
5. USER LOOP TEST SUPPORTED	F			OSF	
6. USER CONSOLE MESSAGE SUPPORTED	F			OSF	
7. ARCHIVE II JUKEBOX INSTALLED	T			OSF/TM	Note 1
8. FAA RMS INSTALLED		F	T		

NOTES: 1. Set to "T" upon installation of Mod. Note 10 (NWS), TCTO 519 (DOD), or FAA Change Notice 6460.2, CHG 1, Chapter 2.

Table 3-7

## SOT ADAPTATION

<u>Menu Description</u>	<u>Value / Units</u>		<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
1. BYPASS MAP GENERATION ELEVATION ANGLE 1	0.5000	DEGREES	-1.0000	45.0000	OSF	
2. BYPASS MAP GENERATION ELEVATION ANGLE 2	1.5000	DEGREES	-1.0000	45.0000	OSF	
3. BYPASS MAP GENERATION ELEVATION ANGLE 3	2.4000	DEGREES	-1.0000	45.0000	OSF	
4. BYPASS MAP GENERATION ELEVATION ANGLE 4	3.4000	DEGREES	-1.0000	45.0000	OSF	
5. BYPASS MAP GENERATION ELEVATION ANGLE 5	99.0000	DEGREES	-1.0000	45.0000	OSF	
6. BYPASS MAP GENERATION ELEVATION ANGLE 6	4.3330	DEGREES	-1.0000	45.0000	OSF	
7. BYPASS MAP GENERATION ELEVATION ANGLE 7	5.8160	DEGREES	-1.0000	45.0000	OSF	
8. BYPASS MAP GENERATION ELEVATION ANGLE 8	8.1000	DEGREES	-1.0000	45.0000	OSF	
9. BYPASS MAP GENERATION ELEVATION ANGLE 9	10.6330	DEGREES	-1.0000	45.0000	OSF	
10. BYPASS MAP GENERATION ELEVATION ANGLE 10	13.5330	DEGREES	-1.0000	45.0000	OSF	
11. BYPASS MAP GENERATION ELEVATION ANGLE 11	16.7000	DEGREES	-1.0000	45.0000	OSF	
12. BYPASS MAP GENERATION ELEVATION ANGLE 12	19.5000	DEGREES	-1.0000	45.0000	OSF	
13. BYPASS MAP GENERATION NOTCH WIDTH	0.5000	M/SEC	0.5000	3.9375	OSF	
14. BYPASS MAP GENERATION NOISE THRESHOLD	9.0000	DB	-6.0000	10.0000	OSF	
15. BYPASS MAP GEN REJECTION RATIO THRESHOLD	9.0000	DB	0.0000	10.0000	OSF	

**Table 3-8****PASSWORD ADAPTATION**

<u>Menu Description</u>	<u>Value / Units</u>	<u>Minimum Value</u>	<u>Maximum Value</u>	<u>LOCA</u>	<u>Comments/TM Ref.</u>
1. LOW ACCESS LEVEL ADAPTATION DATA PASSWORD		1 Char.	5 Char.	Agency	"LOW" Provided
2. HIGH ACCESS LEVEL ADAPTATION DATA PASSWORD	HIGH	1 Char.	5 Char.	OSF	
3. TERMINATE PROGRAM PASSWORD		1 Char.	5 Char.	Agency	"FLOYD" Provided
4. REDUNDANT CHANNEL COMMAND PASSWORD	PINKY	1 Char.	5 Char.	OSF	

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